

REMARKS

Claims 28-50 are pending. Applicant has amended claims 28, 36, and 44.

Applicant would like to thank the Examiner for his consideration during the interview of May 24. During the interview, the Examiner and applicant's representative discussed the invention. Applicant representative later submitted to the Examiner proposed amendments to claim 28 to help clarify the claimed invention. The Examiner indicated that the proposed amendments did indeed help clarify the claimed invention. Claim 28 has been amended as proposed, and the other independent claims have been amended in a similar manner.

Applicant's technology is directed to generating a new representation of a document from a current representation that is based on a hierarchical model. Hierarchical models, such as XML, represent hierarchical relationships explicitly, such as by nesting of elements. A difficulty with such hierarchical models is that there is no support for explicitly representing non-hierarchical relationships between elements. As a result, creators of documents represented with a hierarchical model use various mechanisms, other than that used to represent hierarchical relationships, to represent non-hierarchical relationships. Since the creators may use different mechanisms, it can be difficult to identify these implicit, non-hierarchical relationships automatically. As a result, different techniques need to be developed for each different mechanism used to represent a non-hierarchical relationship.

Applicant's new representation has items corresponding to elements of the document and links between items that correspond to hierarchical and non-hierarchical relationships of the document. Thus, in the new representation, both hierarchical and non-hierarchical relationships are explicitly represented using the same mechanism. Each of the claims recites the generating of this new representation from a current representation of the document that is based on a hierarchical model.

Jacobs, which the Examiner relies upon in rejecting the claims, suggests that non-hierarchical relationships can be explicitly represented in XML documents by introducing a "Link" element. Jacobs, however, neither teaches nor suggests that hierarchical and non-hierarchical relationships can be represented by the same mechanism. Rather, Jacobs' hierarchical relationships are represented by the XML nesting of elements, and Jacobs' non-hierarchical relationships are represented by the "Link" element, which are different mechanisms.

Because Jacobs does not teach, suggest, or motivate the use of the same mechanism to represent both hierarchical and non-hierarchical relationships, claims 28-50 are patentable over Jacobs. Each of these claims recite that the same mechanism, a link between items, is used to represent both hierarchical and non-hierarchical relationships. Moreover, there is nothing in Jacobs to suggest the combination of elements that is recited by each claim.

Based on the above amendments and remarks, applicant respectfully request reconsideration of this application and its early allowance. If the Examiner has any questions or believes a telephone conference would expedite prosecution of this application, the Examiner is encouraged to call the undersigned at (206) 359-8548.

Respectfully submitted,
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